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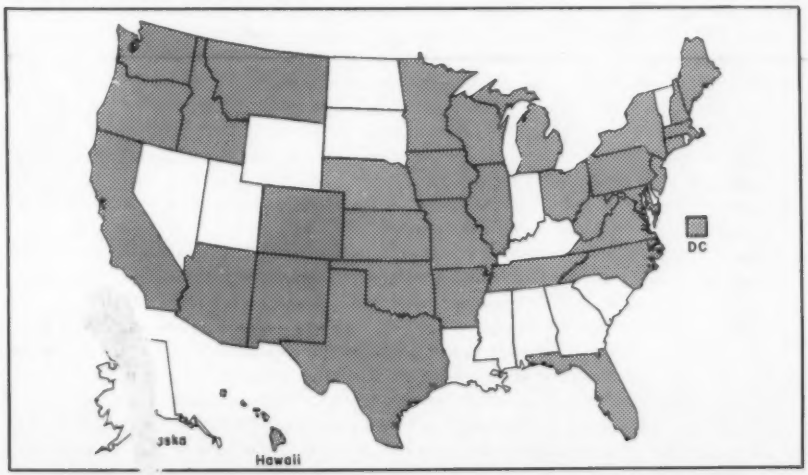
Epidemiologic Notes and Reports

Update on Influenza Activity in the United States, Availability of Influenza Vaccines, and Recommendations for the Use of Vaccines and Amantadine

Update: Influenza Activity — United States

Reports of outbreaks of influenza-like illness increased throughout the continental United States in December. For the week ending January 3, eight states and Puerto Rico reported widespread outbreaks of influenza-like illness, and 17 states and the District of Columbia reported regional outbreaks of influenza-like illness. Most of the reported outbreaks occurred in schools and colleges. No confirmed outbreaks of influenza have been reported in nursing homes or other institutions caring primarily for elderly persons. Consistent with the apparently low impact of the current A(H1N1) strain on the elderly, there has not been a significant increase in mortality from influenza and pneumonia thus far this season. Thirty-four states and the District of Columbia have now reported isolates of A(H1N1) influenza virus (Figure 1). So far this season, influenza type A(H3N2) and type B have been isolated only in association with sporadically occurring cases. Type A(H3N2) influenza has been isolated only in Arizona. Type B influenza has been isolated in two states, California and Texas.

FIGURE 1. States reporting isolates of influenza virus type A(H1N1) — United States, October 1, 1986-January 3, 1987



Influenza – Continued

Availability of Influenza Vaccines and Recommendations and Precautions for the Use of Amantadine

Two of the three United States manufacturers of influenza vaccine, Parke-Davis and Wyeth Laboratories, have reported that they have sold all influenza vaccine, both trivalent and monovalent, produced for the 1986-87 season. The third manufacturer, Connaught Laboratories, reported having limited supplies of both the standard trivalent and the supplemental monovalent (A/Taiwan/86) vaccines as of January 5.

The number of unused distributed doses of influenza vaccine is not known. However, spot shortages exist in at least some parts of the country because some state health departments, institutions, and private physicians have reported being unable to replenish dwindling or exhausted supplies.

Reported by State and Territorial Epidemiologists; State Laboratory Directors; Div of Immunization, Center for Prevention Svcs, WHO Collaborating Center for Influenza, Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

Editorial Note: Although influenza vaccine should be administered before the influenza season, unaffected persons can receive the vaccine after influenza activity begins. Health care personnel should use available vaccine in accordance with the priorities established by the Immunization Practices Advisory Committee (*1,2*). Groups at greatest medical risk of influenza-related complications should receive vaccine before other groups. In particular, remaining supplies of A/Taiwan/86 vaccine should only be used for high-risk persons <35 years of age. High-risk persons of all ages should receive the standard trivalent vaccine.

If patients are vaccinated after local outbreaks of influenza type A have begun, chemoprophylaxis with amantadine may be indicated for the 2 weeks following vaccination, since it takes about 2 weeks to develop an antibody response. Amantadine prophylaxis should also be considered for high-risk patients if vaccine is unavailable. However, for continuous protection against circulating strains of type A influenza, unvaccinated persons must take amantadine throughout the period of local influenza type A virus circulation, which can be 6 to 12 weeks.

Amantadine may also be used for treating influenza type A. When given within the first 48 hours of illness, amantadine has been shown to reduce the severity and shorten the duration of illness in healthy adults. Although the efficacy of amantadine therapy in preventing complications due to influenza is unknown, it should be considered for high-risk patients who develop influenza-like illness during known influenza type A activity.

In determining whether to use amantadine for prophylaxis or treatment of individual patients, the following information should be considered:

1. In controlled studies, 5% to 10% of healthy young adults taking amantadine have reported side effects involving the central nervous system such as insomnia, nervousness, lightheadedness, and impaired concentration. Such side effects are usually mild and cease soon after amantadine is discontinued.
2. Amantadine is not metabolized and is excreted unchanged by the kidneys. When amantadine is administered to patients with impaired renal function, the dose should be reduced. Because of the diminished renal function associated with normal aging, it is recommended that the dosage in persons ≥ 65 years of age not exceed 100 mg/day. Tables for estimating dosage based on creatinine clearance for persons with known renal disease have been published (*1,3*). Since these tables may only provide a rough estimate of the optimal dose for a given patient, it is especially important that patients with renal disease as well as persons ≥ 65 years of age, their relatives, and/or caretakers be informed about potential side effects so that the dosage may be adjusted if necessary.

Influenza — Continued

3. Any patient with an active seizure disorder should not be given more than 100 mg of amantadine daily.
4. The use of amantadine in children < 1 year of age has not been adequately evaluated. The approved dosage for children 1-9 years of age is 4.4 to 8.8 mg/kg/day, not to exceed 150 mg/day. To reduce the risk of toxicity, physicians should consider prescribing the lower range of the approved dosage for children.

References

1. ACIP. Prevention and control of influenza. MMWR 1986;35:317-26,331.
2. ACIP. Monovalent influenza A(H1N1) vaccine, 1986-87. MMWR 1986;35:517-21.
3. Horadam VW, Sharp JG, Smilack JD, McAnalley BH, Garriott JC, Stephens MK, et al. Pharmacokinetics of amantadine hydrochloride in subjects with normal and impaired renal function. Ann Intern Med 1981;94:454-8.

Current Trends

Compendium of Animal Rabies Control, 1987
Prepared by: The National Association of State Public Health Veterinians, Inc.*

Part I: Recommendations for Immunization Procedures

The purpose of these recommendations is to provide information on rabies vaccines to practicing veterinarians, public health officials, and others concerned with rabies control. This document will serve as the basis for animal rabies vaccination programs throughout the United States. Its adoption will result in standardization of procedures among jurisdictions which is necessary for an effective national rabies control program. These recommendations are reviewed and revised as necessary prior to the beginning of each calendar year. All animal rabies vaccines licensed by the U.S. Department of Agriculture and marketed in the United States are listed in Part II of the Compendium, and Part III describes the principles of rabies control.

A. VACCINE ADMINISTRATION

It is recommended that all animal rabies vaccines be restricted to use by or under the supervision of a veterinarian.

B. VACCINE SELECTION

In comprehensive rabies control programs, it is recommended that only vaccines with 3-year duration of immunity be used. This eliminates the need for annual vaccination and constitutes the most effective method of increasing the proportion of immunized dogs and cats. (See Part II)

C. ROUTE OF INOCULATION

Unless otherwise specified by the product label or package insert, all vaccines must be administered intramuscularly at one site in the thigh.

D. WILDLIFE VACCINATION

Vaccination is not recommended since no rabies vaccine is licensed for use in wild animals

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ENDORSED BY: Council of State and Territorial Epidemiologists; AVMA Council on Public Health and Regulatory Veterinary Medicine.

Rabies – Continued

and since there is no evidence that any vaccine will protect wild animals against rabies. It is recommended that neither wild nor exotic animals be kept as pets. Offspring borne to wild animals bred with domestic dogs or cats will be considered as wild animals.

E. ACCIDENTAL HUMAN EXPOSURE TO VACCINE

Accidental inoculation may occur in individuals during administration of animal rabies vaccine. Such exposure to inactivated vaccines constitutes no known rabies hazard. There have been no cases of rabies resulting from needle or other exposure to a licensed modified live virus vaccine in the United States.

F. IDENTIFICATION OF VACCINATED DOGS

It is recommended that all agencies and veterinarians adopt the standard tag system. This will aid the administration of local, state, national, and international procedures. Dog license tags should not conflict in shape and color with rabies tags. It is recommended that anodized aluminum rabies tags should not be less than 0.064 inches in thickness.

1. **Rabies Tags.**

Calendar Year	Color	Shape
1987	Green	Bell
1988	Red	Heart
1989	Blue	Rosette
1990	Orange	Fireplug

2. **Rabies Certificate.** All agencies and veterinarians should use the National Association of State Public Health Veterinarians (NASPHV) form #50 Rabies Vaccination Certificate, which can be obtained from vaccine manufacturers.

Part II: Vaccines Marketed in the United States and NASPHV Recommendations

Product name	Produced by	Marketed by	For use in*	Dosage†	Age at primary vaccination§	Booster recommended
A. MODIFIED LIVE VIRUS						
ENDURALL-R	NORDEN		Dogs	1 ml	3 mos. & 1 yr. later	Triennially
	License No. 189	Norden	Cats	1 ml	3 mos.	Annually
NEUROGEN-TC	BOEHRINGER INGELHEIM					
	License No. 124	Bio-Ceutic	Dogs	1 ml	3 mos. & 1 yr. later	Triennially
B. INACTIVATED						
TRIMUNE	FORT DODGE		Dogs	1 ml	3 mos. & 1 yr. later	Triennially
	License No. 112	Fort Dodge	Cats	1 ml	3 mos. & 1 yr. later	Triennially
ANNUMUNE	FORT DODGE		Dogs	1 ml	3 mos.	Annually
	License No. 112	Fort Dodge	Cats	1 ml	3 mos.	Annually
BIORAB-1	DOUGLAS	Schering	Dogs	1 ml	3 mos.	Annually
	License No. 165-B	Veterinary TechAmerica	Cats	1 ml	3 mos.	Annually
BIORAB-3	DOUGLAS	Schering			3 mos. &	
	License No. 165-B	Veterinary TechAmerica	Dogs	1 ml	1 yr. later	Triennially
			Cats	1 ml	3 mos.	Annually

Rabies — Continued

Part II: Vaccines Marketed in the United States and NASPHV Recommendations — Continued

Product name	Produced by	Marketed by	For use in*	Dosage†	Age at primary vaccination§	Booster recommended
B. INACTIVATED						
RABMUNE 3	DOUGLAS		Dogs	1 ml	3 mos. & 1 yr. later	Triennially
	License No. 165-B	Beecham	Cats	1 ml	3 mos.	Annually
DURA-RAB 1	WILDLIFE VACCINES, Inc.	Wildlife Vaccines, Inc.	Dogs	1 ml	3 mos.	Annually
	KUNZ-TEBBIT License No. 277	Kunz-Tebbit	Cats	1 ml	3 mos.	Annually
RABCINE	BEECHAM		Dogs	1 ml	3 mos.	Annually
	License No. 225	Beecham	Cats	1 ml	3 mos.	Annually
ENDURALL-K	NORDEN		Dogs	1 ml	3 mos.	Annually
	License No. 189	Norden	Cats	1 ml	3 mos.	Annually
RABGUARD-TC	NORDEN		Dogs	1 ml	3mos. & 1 yr. later	Triennially
	License No. 189	Norden	Cats	1 ml	3 mos. & 1 yr. later	Triennially
			Sheep	1 ml	3 mos.	Annually
			Cattle	1 ml	3 mos.	Annually
			Horses	1 ml	3 mos.	Annually
CYTORAB	COOPERS ANIMAL HEALTH, INC.	Coopers	Dogs	1 ml	3 mos.	Annually
	License No. 107		Cats	1 ml	3 mos.	Annually
TRIRAB	COOPERS ANIMAL HEALTH, INC.	Coopers Durvet	Dogs	1 ml	3 mos. & 1 yr. later	Triennially
	License No. 107		Cats	1 ml	3 mos.	Annually
RABVAC 1	FROMM		Dogs	1 ml	3 mos.	Annually
	License No. 195-A	Fromm	Cats	1 ml	3 mos.	Annually
RABVAC 3	FROMM		Dogs	1 ml	3mos. & 1 yr. later	Triennially
	License No. 195-A	Fromm	Cats	1 ml	3 mos. & 1 yr. later	Triennially
IMRAB	MERIEUX		Dogs	1 ml	3 mos.	Triennially
	License No. 298	Pitman-Moore	Cats	1 ml	& 1 yr.	Triennially
			Sheep	1 ml	later	Triennially
			Cattle	2 ml	3 mos.	Annually
			Horses	2 ml	3 mos.	Annually
IMRAB-1	MERIEUX		Dogs	1 ml	3 mos.	Annually
	License No. 298	Pitman-Moore	Cats	1 ml	3 mos.	Annually
C. COMBINATION						
ECLIPSE 3 KP-R	FROMM					
	License No. 195-A	Fromm	Cats	1 ml	3 mos.	Annually
ECLIPSE 4 KP-R	FROMM					
	License No. 195-A	Fromm	Cats	1 ml	3 mos.	Annually
CYTORAB RCP	COOPERS ANIMAL HEALTH, INC.	Coopers	Cats	1 ml	3 mos.	Annually
	License No. 107					

Rabies — Continued

Part II: Vaccines Marketed in the United States and NASPHV Recommendations — Continued

Product name	Produced by	Marketed by	For use in*	Dosage†	Age at primary vaccination§	Booster recommended
C. COMBINATION						
FEL-O-VAX PCT-R	FORT DODGE License No. 112	Fort Dodge	Cats	1 ml	3 mos. & 1 yr. later	Triennially
ECLIPSE 4-R	FROMM License No. 195-A	Fromm	Cats	1 ml	3 mos.	Annually

*Refers only to domestic species of this class of animals.

†All vaccines must be administered intramuscularly at one site in the thigh unless otherwise specified by the label.

§Three months of age (or older) and revaccinated 1 year later.

(Continued on page 815)

TABLE I. Summary—cases specified notifiable diseases, United States

Disease	53rd Week Ending			Cumulative, 53rd Week Ending		
	Jan. 3, 1987	Dec. 28, 1985	Median 1981-1985	Jan. 3, 1987	Dec. 28, 1985	Median 1981-1985
Acquired Immunodeficiency Syndrome (AIDS)	134	183	N	13,008	8,183*	N
Aseptic meningitis	108	221	209	10,748	10,379	9,733
Encephalitis: Primary (arthropod-borne & unspec.)	15	35	40	1,233	1,320	1,540
Post-infectious	1	3	3	99	118	101
Gonorrhea: Civilian	10,501	13,646	14,160	896,383	883,826	898,104
Military	176	344	344	17,182	20,488	23,791
Hepatitis: Type A	379	654	727	23,117	23,169	23,169
Type B	380	755	755	25,867	26,528	24,482
Non A, Non B	43	95	N	3,482	4,081	N
Unspecified	59	114	156	4,401	5,755	7,251
Legionellosis	23	28	N	833	780	N
Leprosy	-	2	12	264	352	251
Malaria	8	26	30	1,089	1,034	1,034
Measles: Total*	42	77	48	6,273	2,812	2,579
Indigenous	40	74	N	5,974	2,373	N
Imported	2	3	N	299	439	N
Meningococcal infections: Total†	28	68	86	2,481	2,425	2,729
Civilian	28	68	85	2,479	2,418	2,713
Military	-	-	-	2	7	14
Mumps	983	62	84	6,807	2,955	3,348
Pertussis	62	101	101	4,162	3,579	2,288
Rubella (German measles)	2	5	12	502	618	959
Syphilis (Primary & Secondary): Civilian	330	467	459	27,599	26,868	30,876
Military	2	7	7	163	163	361
Toxic Shock syndrome	7	9	N	353	367	N
Tuberculosis	366	997	864	22,575	22,144	23,840
Tularemia	1	3	11	167	178	288
Typhoid fever	-	22	22	323	403	420
Typhus fever, tick-borne (RMSF)	10	11	11	755	696	971
Rabies, animal	54	115	100	5,297	5,394	5,824

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1986		Cum. 1986
Anthrax	-	Leptospirosis	40
Botulism: Foodborne (Wash. 1)	19	Plague	10
Infant (Wash. 1)	71	Poliomyelitis, Paralytic	2
Other	1	Psittacosis	95
Brucellosis (Nebr. 2, Calif. 1)	90	Rabies, human	-
Cholera	17	Tetanus	61
Congenital rubella syndrome	11	Trichinosis (Mass. 1)	35
Congenital syphilis, ages < 1 year	107	Typhus fever, flea-borne (endemic, murine)	48
Diphtheria	-		

*172 cases were reported between Dec. 29-31, 1985.

†Two of the 42 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending January 3, 1987 and December 28, 1985 (53rd and 52nd Weeks)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum 1986	1986	Cum 1986	Cum 1986	Cum 1986	Cum 1985	1986	1986	1986	1986	1986	Cum 1986
UNITED STATES	13,008	106	1,233	99	896,383	883,826	379	380	43	59	23	254
NEW ENGLAND	517	3	34	3	24,553	22,540	12	41	2	2	2	8
Maine	20	1	6	-	881	1,147	-	3	-	-	1	-
N H	14	1	2	-	594	573	-	-	-	-	-	-
Vt	5	-	4	2	264	335	-	2	-	-	-	-
Mass	272	1	6	-	8,731	9,528	1	26	2	2	1	8
R I	34	-	-	-	1,893	1,843	6	3	-	-	-	-
Conn	172	-	16	1	12,210	9,114	5	7	-	-	-	-
MID ATLANTIC	4,820	3	116	10	160,906	129,038	11	20	2	18	-	20
Upstate N Y	498	3	40	6	19,144	18,178	7	6	1	-	-	1
N Y City	3,269	-	21	1	94,301	62,803	-	4	-	18	-	18
N J	749	-	11	-	20,479	19,592	4	10	1	-	-	-
Pa	304	-	44	3	26,982	28,465	-	-	-	-	-	1
E N CENTRAL	799	7	375	11	114,732	114,850	38	29	1	1	7	5
Ohio	188	7	140	3	30,204	31,737	30	20	-	-	7	-
Ind	67	U	82	3	12,131	12,504	U	U	U	U	U	-
Ill	363	-	52	4	26,568	26,172	-	-	-	-	-	4
Mich	139	-	66	1	38,145	33,516	8	9	1	1	-	1
Wis	42	-	35	-	7,432	10,921	-	-	-	-	-	1
W N CENTRAL	243	13	93	9	38,259	41,074	23	23	4	-	4	4
Minn	98	-	41	-	5,548	5,997	-	-	-	-	-	2
Iowa	20	1	29	-	3,948	4,302	-	3	-	-	-	-
Mo	73	7	3	-	18,817	19,993	-	12	2	-	-	-
N Dak	3	-	4	-	308	288	-	-	-	-	-	-
S Dak	2	-	11	-	783	790	3	-	-	-	-	-
Nebr	11	2	2	1	2,799	3,565	15	6	-	-	3	-
Kans	36	3	3	8	6,056	6,139	5	2	2	-	1	2
S ATLANTIC	1,860	20	156	40	231,354	231,555	33	91	2	6	5	4
Del	23	-	6	-	3,818	4,443	7	1	-	-	-	-
Md	180	3	36	1	27,095	29,589	5	25	1	-	1	-
D C	241	-	1	1	17,183	15,695	2	1	-	-	-	-
Va	158	-	45	1	18,787	19,234	-	-	-	-	-	-
W Va	8	-	46	-	2,273	2,598	2	2	-	-	-	1
N C	81	1	18	2	35,968	36,320	-	9	-	1	-	-
S C	50	-	-	-	19,105	21,326	3	19	-	-	-	-
Ga	285	5	-	1	38,933	44,723	4	19	-	4	3	-
Fla	834	11	4	34	68,192	57,627	10	15	1	1	1	3
E S CENTRAL	163	21	71	4	70,923	76,081	8	39	6	2	-	1
Ky	32	6	32	1	7,825	8,732	7	12	3	-	-	-
Tenn	73	9	9	1	26,857	29,534	1	20	2	2	-	-
Ala	30	3	29	2	20,786	22,506	-	2	-	-	-	1
Miss	28	3	1	-	15,455	15,309	-	5	1	-	-	-
W S CENTRAL	1,189	9	190	8	102,322	110,285	12	14	6	7	1	25
Ark	29	-	-	4	9,590	10,350	1	1	-	1	-	1
La	162	-	19	-	17,618	20,767	-	3	-	-	-	1
Okla	48	4	22	-	11,833	12,470	3	3	1	2	-	-
Tex	950	5	149	4	63,281	66,698	8	7	5	4	1	23
MOUNTAIN	342	1	40	1	26,136	28,022	53	32	7	5	1	13
Mont	5	-	1	1	677	795	7	1	-	-	-	-
Idaho	3	-	-	-	872	991	1	-	-	-	-	-
Wyo	4	-	2	-	535	648	-	-	-	-	-	-
Colo	166	-	5	-	6,689	8,110	2	3	-	-	1	3
N Mex	25	-	3	-	2,772	3,112	8	1	1	2	-	-
Ariz	81	1	19	-	8,542	8,576	29	23	6	3	-	7
Utah	21	-	8	-	1,124	1,349	1	2	-	-	-	1
Nev	37	-	2	-	4,925	4,441	5	2	-	-	-	2
PACIFIC	3,075	29	158	13	127,198	130,381	189	91	13	18	3	174
Wash	174	-	15	1	9,064	10,073	52	8	1	2	1	17
Oreg	63	-	-	-	5,470	6,367	27	10	2	-	-	-
Calif	2,770	24	134	12	108,931	109,081	107	71	8	16	2	118
Alaska	14	-	7	-	2,666	3,178	3	1	2	-	-	-
Hawaii	54	5	2	-	1,319	1,682	-	1	-	-	-	38
Guam	-	U	-	-	225	199	U	U	U	U	U	1
P R	115	-	6	1	2,343	3,076	3	3	-	-	-	7
V I	4	U	-	-	268	395	U	U	U	U	U	-
Pac Trust Terr	-	U	-	-	483	766	U	U	U	U	U	63
Amer Samoa	-	U	-	-	59	-	U	U	U	U	U	3

N Not notifiable U Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending January 3, 1987 and December 28, 1985 (53rd and 52nd Weeks)

Reporting Area	Malaria	Measles (Rubeola)					Meningococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported *		Total									
	Cum 1986	1986	Cum 1986	1986	Cum 1986	Cum 1985	Cum 1986	1986	Cum 1986	1986	Cum 1986	Cum 1985	1986	Cum 1986	Cum 1985
UNITED STATES	1,089	40	5,974	2	299	2,812	2,481	983	6,807	62	4,162	3,579	2	502	618
NEW ENGLAND	65	-	88	-	16	126	173	2	73	25	208	216	1	10	14
Maine	2	-	12	-	1	1	29	-	-	-	2	9	-	-	-
N H	4	-	43	-	-	-	6	-	15	-	85	113	-	1	3
Vt	2	-	-	-	-	-	19	-	5	2	5	4	-	1	-
Mass	33	-	24	-	13	118	53	2	17	23	83	54	1	5	7
R I	8	-	2	-	-	-	24	-	13	-	7	23	-	2	-
Conn	16	-	7	-	2	7	42	-	23	-	28	13	-	1	4
MID ATLANTIC	148	8	1,948	2	39	236	393	2	220	8	232	271	-	37	234
Upstate N Y	54	-	77	2†	26	86	139	2	78	8	151	134	-	27	21
N Y City	31	8	939	-	5	80	74	-	29	-	10	29	-	5	188
N J	37	-	906	-	5	30	30	-	53	-	20	12	-	5	11
Pa	26	-	26	-	2	40	150	-	60	-	51	96	-	-	14
E N CENTRAL	61	-	1,124	-	28	582	391	74	3,735	-	390	856	-	57	39
Ohio	19	-	-	-	10	60	154	-	150	-	170	120	-	1	-
Ind	2	U	27	U	11	57	39	U	90	U	36	216	U	-	1
Ill	16	-	706	-	4	346	86	73	2,743	-	39	86	-	39	20
Mich	20	-	107	-	-	60	81	1	469	-	36	54	-	15	17
Wis	4	-	284	-	3	59	30	-	283	-	106	380	-	2	1
W N CENTRAL	32	-	324	-	18	14	113	13	242	-	1,409	271	-	14	19
Minn	10	-	45	-	5	6	24	4	52	-	49	139	-	1	2
Iowa	1	-	133	-	1	-	11	9	96	-	19	34	-	1	1
Mo	12	-	28	-	6	5	41	-	27	-	24	35	-	1	7
N Dak	-	-	25	-	1	2	1	-	4	-	5	10	-	1	2
S Dak	2	-	-	-	-	-	5	-	1	-	14	11	-	-	-
Nebr	4	-	1	-	-	-	12	-	2	-	10	11	-	-	-
Kans	3	-	94	-	5	1	19	-	60	-	1,288	31	-	10	7
S ATLANTIC	135	1	809	-	57	344	443	5	280	2	786	571	-	12	56
Del	1	-	1	-	-	-	8	-	1	-	227	2	-	-	2
Md	15	-	26	-	9	115	50	1	32	-	167	328	-	1	6
D C	5	-	-	-	2	31	6	-	1	-	-	-	-	-	-
Va	38	-	36	-	24	28	79	-	46	-	56	21	-	-	2
W Va	4	-	2	-	-	33	4	3	52	-	27	5	-	-	9
N C	7	-	3	-	1	9	89	-	29	1	89	39	-	-	1
S C	7	-	274	-	-	3	46	-	19	-	18	3	-	-	3
Ga	14	-	79	-	14	8	65	-	28	1	136	102	-	-	3
Fla	44	1	388	-	7	117	116	1	58	-	66	71	-	11	30
E S CENTRAL	22	-	61	-	9	7	126	855	1,185	-	47	74	-	4	3
Ky	6	-	-	-	6	5	32	-	6	-	5	9	-	4	3
Tenn	1	-	55	-	1	1	38	855	1,174	-	16	28	-	-	-
Ala	10	-	1	-	1	-	41	-	4	-	25	30	-	-	-
Miss	5	-	5	-	1	1	15	-	1	-	1	7	-	-	-
W S CENTRAL	107	-	680	-	38	493	230	5	421	5	259	575	-	73	42
Ark	1	-	276	-	2	-	31	-	184	-	20	17	-	1	1
La	19	-	4	-	-	42	28	1	8	-	16	18	-	-	-
Okla	12	-	37	-	2	1	33	N	N	5	134	182	-	-	2
Tex	75	-	363	-	34	450	138	4	229	-	89	358	-	72	39
MOUNTAIN	42	-	303	-	29	541	115	3	269	16	298	272	1	25	6
Mont	1	-	-	-	8	137	11	-	6	3	23	10	-	2	-
Idaho	1	-	1	-	-	137	4	-	9	-	51	30	-	-	2
Wyo	-	-	-	-	-	5	2	-	-	-	4	1	-	1	-
Colo	13	-	2	-	8	15	22	-	18	-	66	107	-	1	-
N Mex	5	-	33	-	7	6	14	N	N	-	29	15	-	-	2
Ariz	15	-	252	-	6	241	25	3	209	13	78	49	-	2	1
Utah	4	-	13	-	-	-	10	-	16	-	43	60	1	16	-
Nev	3	-	2	-	-	-	27	-	11	-	4	-	-	3	1
PACIFIC	477	31	637	-	65	469	497	4	396	6	533	473	-	270	205
Wash	33	-	148	-	28	171	67	1	27	2	163	92	-	17	16
Oreg	19	-	7	-	4	5	38	N	N	-	16	54	-	4	2
Calif	423	31	455	-	31	269	364	3,	337	4	316	278	-	242	138
Alaska	1	-	-	-	-	-	14	-	8	-	5	30	-	-	1
Hawaii	1	-	27	-	2	24	15	-	24	-	36	19	-	7	48
Guam	2	U	4	U	1	11	1	U	4	U	-	-	U	4	3
P R	4	17	61	-	-	67	4	-	35	-	19	16	-	62	27
V I	-	U	-	U	-	10	-	U	18	U	-	-	U	-	-
Pac Trust Terr	-	U	-	U	-	-	1	U	11	U	-	-	U	4	-
Amer Samoa	-	U	2	U	-	-	-	U	5	U	-	-	U	1	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending January 3, 1987 and December 28, 1985 (53rd and 52nd Weeks)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum 1986	Cum 1985	1986	Cum 1986	Cum 1985	Cum 1986	Cum 1986	Cum 1986	Cum 1986
UNITED STATES	27,599	26,868	7	22,575	22,144	167	323	755	5,297
NEW ENGLAND	487	588	1	735	744	1	16	13	8
Maine	19	17	-	34	47	-	-	-	-
N H	13	41	-	30	23	-	-	2	1
Vt	9	8	-	17	8	-	-	-	2
Mass	264	286	1	429	449	1	13	4	-
R I	19	20	-	49	53	-	-	3	3
Conn	163	216	-	176	164	-	3	4	2
MID ATLANTIC	3,980	3,636	-	4,364	3,890	2	26	41	676
Upstate N Y	208	271	-	617	661	-	5	20	84
N Y City	2,268	2,190	-	2,316	1,909	-	11	6	-
N J	681	706	-	725	549	2	9	2	17
Pa	823	469	-	706	771	-	1	13	575
E N. CENTRAL	855	978	-	2,611	2,667	1	23	44	144
Ohio	141	146	-	483	459	-	9	38	16
Ind	108	83	U	269	336	-	2	-	17
Ill	384	429	-	1,146	1,193	-	3	2	45
Mich	181	254	-	624	537	1	6	4	25
Wis	41	66	-	109	142	-	3	-	41
W N. CENTRAL	208	236	-	653	650	48	9	53	844
Minn	33	45	-	155	132	-	2	1	149
Iowa	9	20	-	47	60	1	-	1	192
Mo	110	133	-	323	311	37	6	29	75
N Dak	5	2	-	10	12	-	-	1	156
S Dak	9	6	-	29	31	3	-	6	178
Nebr	11	8	-	18	22	1	-	5	37
Kans	31	22	-	71	82	6	1	10	57
S. ATLANTIC	8,465	7,723	-	4,673	4,700	13	48	333	1,333
Del	63	41	-	49	53	-	1	1	1
Md	471	501	-	327	418	2	16	29	580
D C	309	336	-	162	157	1	4	-	41
Va	324	296	-	403	488	3	11	51	201
W Va	20	26	-	126	109	-	3	10	62
N C	533	682	-	737	654	3	4	129	10
S C	715	794	-	593	568	-	1	71	65
Ga	1,543	1,399	-	787	828	4	-	40	201
Fla	4,487	3,648	-	1,489	1,425	-	8	2	172
E S. CENTRAL	1,813	2,069	1	1,982	1,925	16	4	120	364
Ky	71	65	1	457	463	7	-	26	106
Tenn	644	645	-	589	576	7	1	46	138
Ala	516	651	-	601	531	1	1	25	117
Miss	582	708	-	335	355	1	2	23	3
W S. CENTRAL	5,259	6,206	2	2,883	2,759	69	34	140	723
Ark	255	319	1	399	362	50	-	16	165
La	917	1,076	-	433	388	1	3	1	22
Okla	154	201	1	252	259	13	2	104	62
Tex	3,933	4,610	-	1,799	1,750	5	29	19	474
MOUNTAIN	646	772	1	568	625	12	16	10	680
Mont	7	6	-	29	50	1	1	4	219
Idaho	16	8	-	25	26	-	-	2	9
Wyo	4	14	-	-	8	1	-	1	276
Colo	141	215	-	82	106	3	1	3	29
N Mex	74	128	-	103	94	2	1	-	7
Ariz	269	325	-	257	271	-	9	-	102
Utah	21	13	1	31	31	4	3	-	7
Nev	114	65	-	41	39	1	1	-	11
PACIFIC	5,886	4,660	2	4,106	4,184	5	147	1	545
Wash	168	115	-	221	220	1	3	-	5
Oreg	127	111	2	134	139	-	-	-	4
Calif	5,553	4,360	-	3,502	3,528	3	137	1	527
Alaska	2	4	-	65	110	1	1	-	9
Hawaii	36	70	-	184	189	-	6	-	-
Guam	1	2	U	35	38	-	1	-	-
P R	849	875	-	383	342	-	5	-	48
V I	1	3	U	1	6	-	-	-	-
Pac. Trust Terr	314	128	U	97	75	-	49	-	-
Amer Samoa	1	-	U	5	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending January 3, 1987 (53rd Week)

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	760	536	132	52	12	28	67
Boston, Mass.	198	124	41	19	5	9	21
Bridgeport, Conn.	57	41	8	3	4	1	6
Cambridge, Mass.	33	29	1	3	-	-	4
Fall River, Mass.	25	17	7	1	-	-	1
Hartford, Conn.	79	58	10	6	1	4	3
Lowell, Mass.	31	23	6	2	-	-	2
Lynn, Mass.	23	21	2	-	-	-	2
New Bedford, Mass.	24	21	2	1	-	-	2
New Haven, Conn.	56	36	10	4	-	6	4
Providence, R.I.	79	57	11	5	1	5	9
Somerville, Mass.	6	5	1	-	-	-	-
Springfield, Mass.	49	34	9	3	-	3	5
Waterbury, Conn.	43	33	8	1	1	-	5
Worcester, Mass.	57	37	16	4	-	-	3
MID ATLANTIC	2,883	1,889	584	297	62	51	138
Albany, N.Y.	63	50	5	2	1	5	2
Allentown, Pa.	18	14	4	-	-	-	-
Buffalo, N.Y.	94	36	29	20	8	1	6
Camden, N.J.	53	35	13	5	-	-	2
Elizabeth, N.J.	13	9	3	1	-	-	1
Erie, Pa †	42	31	8	3	-	-	4
Jersey City, N.J.	34	25	7	2	-	-	-
N.Y. City, N.Y.	1,634	1,055	338	194	32	15	75
Newark, N.J. §	82	36	21	17	4	4	2
Paterson, N.J.	29	18	4	3	1	3	-
Philadelphia, Pa.	293	185	58	26	6	18	12
Pittsburgh, Pa †	129	98	23	4	2	2	1
Reading, Pa.	34	29	4	-	1	-	5
Rochester, N.Y.	125	86	27	6	4	2	15
Schenectady, N.Y.	31	23	8	-	-	-	3
Scranton, Pa †	32	24	5	1	2	-	-
Syracuse, N.Y.	93	71	16	5	-	1	5
Trenton, N.J.	14	8	3	2	1	-	1
Utica, N.Y.	22	18	3	1	-	-	2
Yonkers, N.Y.	48	38	5	5	-	-	2
E.N. CENTRAL	2,311	1,546	496	147	51	71	94
Akron, Ohio	30	21	6	1	-	2	-
Canton, Ohio	36	28	7	-	1	-	5
Chicago, Ill §	564	362	125	45	10	22	16
Cincinnati, Ohio	118	78	30	6	2	2	14
Cleveland, Ohio	159	116	31	6	2	4	3
Columbus, Ohio	172	99	41	14	7	11	5
Dayton, Ohio	103	69	24	6	4	-	3
Detroit, Mich. §	283	177	64	26	8	8	6
Evansville, Ind.	36	24	9	3	-	-	1
Fort Wayne, Ind.	45	35	7	2	1	-	1
Gary, Ind. §	11	7	3	1	-	-	-
Grand Rapids, Mich.	87	58	19	6	2	2	8
Indianapolis, Ind.	156	107	31	5	4	9	2
Madison, Wis. §	38	27	8	2	-	1	5
Milwaukee, Wis.	136	97	21	10	2	6	8
Peoria, Ill.	44	32	11	-	-	1	5
Rockford, Ill.	44	31	7	1	4	1	4
South Bend, Ind.	55	33	15	4	2	1	5
Toledo, Ohio	117	86	21	8	1	1	3
Youngstown, Ohio	77	59	16	1	1	-	-
W.N. CENTRAL	747	515	155	43	19	15	49
Des Moines, Iowa	38	27	10	1	-	-	3
Duluth, Minn.	24	18	3	-	2	1	1
Kansas City, Kans.	32	14	12	3	-	3	1
Kansas City, Mo.	90	69	16	5	-	-	6
Lincoln, Nebr.	31	29	1	1	-	-	2
Minneapolis, Minn.	191	143	33	10	4	1	9
Omaha, Nebr.	66	44	17	3	2	-	7
St. Louis, Mo.	166	98	39	15	8	6	12
St. Paul, Minn.	61	40	12	3	2	4	3
Wichita, Kans.	48	33	12	2	1	-	5
S. ATLANTIC	1,130	723	248	96	33	29	47
Atlanta, Ga.	120	70	26	19	3	2	4
Baltimore, Md.	197	127	46	16	5	3	12
Charlotte, N.C.	74	38	24	10	2	-	4
Jacksonville, Fla.	141	95	31	4	8	3	9
Miami, Fla.	103	61	22	15	4	1	1
Norfolk, Va.	52	33	9	6	2	2	3
Richmond, Va.	70	42	20	6	-	2	2
Savannah, Ga.	47	28	15	2	1	1	1
St. Petersburg, Fla.	116	100	10	2	3	1	3
Tampa, Fla.	60	42	13	1	-	3	4
Washington, D.C.	135	73	31	15	5	11	4
Wilmington, Del.	15	14	1	-	-	-	-
E.S. CENTRAL	714	476	154	45	25	14	43
Birmingham, Ala.	71	49	10	5	3	4	1
Chattanooga, Tenn.	57	45	6	2	3	1	5
Knoxville, Tenn.	82	55	17	6	3	1	6
Louisville, Ky.	95	68	21	3	2	1	8
Memphis, Tenn.	212	133	55	12	7	5	14
Mobile, Ala.	27	19	4	2	-	2	1
Montgomery, Ala.	49	33	11	3	2	-	3
Nashville, Tenn.	121	74	30	12	5	-	5
W.S. CENTRAL	975	604	208	91	39	33	48
Austin, Tex.	39	24	7	3	2	3	1
Baton Rouge, La.	48	35	7	6	-	-	2
Corpus Christi, Tex.	37	23	10	2	-	2	3
Dallas, Tex.	148	79	33	19	10	7	3
El Paso, Tex.	43	26	12	2	-	3	6
Fort Worth, Tex.	82	41	16	9	7	9	5
Houston, Tex.	170	107	36	20	4	3	5
Little Rock, Ark.	41	25	10	5	1	-	3
New Orleans, La.	99	60	23	12	4	-	1
San Antonio, Tex.	125	84	26	6	6	3	9
Shreveport, La.	51	36	9	1	2	3	5
Tulsa, Okla.	92	64	19	6	3	-	5
MOUNTAIN	684	470	127	52	19	15	50
Albuquerque, N.Mex.	85	60	14	8	1	2	4
Colo. Springs, Colo.	58	40	9	3	4	1	9
Denver, Colo.	100	68	25	4	1	2	5
Las Vegas, Nev.	79	47	22	7	2	1	3
Ogden, Utah	26	19	4	2	1	-	5
Phoenix, Ariz.	137	92	22	11	8	4	5
Pueblo, Colo.	31	24	5	2	-	-	6
Salt Lake City, Utah	60	43	9	5	1	2	3
Tucson, Ariz.	108	77	17	10	1	3	10
PACIFIC	1,870	1,248	376	146	50	46	113
Berkeley, Calif.	23	16	4	2	-	1	2
Fresno, Calif.	102	75	20	1	1	5	12
Glendale, Calif.	22	16	1	4	-	1	-
Honolulu, Hawaii	52	31	10	6	3	2	6
Long Beach, Calif.	81	54	18	5	1	3	9
Los Angeles, Calif.	514	330	111	47	17	8	11
Oakland, Calif.	88	51	20	10	2	5	3
Pasadena, Calif. §	27	23	2	1	-	1	1
Portland, Oreg.	96	70	15	5	2	4	5
Sacramento, Calif.	145	101	35	4	2	3	12
San Diego, Calif.	150	102	26	11	6	5	11
San Francisco, Calif.	187	102	41	35	6	2	13
San Jose, Calif.	167	119	33	6	4	5	18
Seattle, Wash.	124	85	27	4	5	3	8
Spokane, Wash.	48	38	5	4	1	-	2
Tacoma, Wash.	44	35	8	1	-	-	3
TOTAL	12,074††	8,007	2,480	969	310	302	649

* Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

** Pneumonia and influenza.

† Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 5 weeks.

†† Total includes unknown ages.

§ Data not available. Figures are estimates based on average of past 4 weeks.

Rabies – Continued

Part III: Principles of Rabies Control

These guidelines have been prepared by the NASPHV for use by government officials, practicing veterinarians, and others who may become involved in certain aspects of rabies control. It is intended that the NASPHV will annually review and revise these recommendations as necessary. Standardized control procedures are needed to deal effectively with the public health aspects of rabies.

A. PRINCIPLES OF RABIES CONTROL

1. **Human Rabies Prevention**. Rabies in humans can be prevented either by eliminating exposures to rabid animals or in exposed persons by prompt local wound treatment combined with appropriate passive and active immunization. The rationale for recommending pre-exposure and post-exposure rabies prophylaxis and details of their administration can be found in the current recommendations of the Immunization Practices Advisory Committee (ACIP), of the U.S. Public Health Service (USPHS) (*1,2*). These recommendations, along with information concerning the current local and regional status of animal rabies and the availability of human rabies biologics, are available from state health departments.
2. **Domestic Animals**. Local governments should initiate and maintain effective programs to remove stray and unwanted animals and ensure vaccination of all dogs and cats. Since cat rabies cases now exceed the annually reported cases in dogs, immunization of cats should be required. Such procedures in the United States have reduced laboratory confirmed rabies cases in dogs from 6,949 in 1947 to 113 in 1985. The recommended vaccination procedures and the licensed animal vaccines are specified in Parts I and II of the NASPHV's annually released compendium.
3. **Rabies in Wildlife**. The control of rabies in foxes, skunks, raccoons, and other terrestrial animals is very difficult. Selective reduction of these populations when indicated may be useful, but the utility of this procedure depends heavily upon the circumstances surrounding each rabies outbreak. (See C. Control Methods in Wild Animals.)

B. CONTROL METHODS IN DOMESTIC AND CONFINED ANIMALS

1. **Pre-exposure Vaccination and Management**. Animal rabies vaccines should be administered only by or under the direct supervision of a veterinarian. This is the only way to assure the public that the animal has been properly immunized. Within 1 month after vaccination, a peak rabies antibody titer is reached and the animal can be considered to be immunized. (See Parts I and II of the compendium for recommended vaccines and procedures.)
   a. **Dogs and Cats**. All dogs and cats should be vaccinated against rabies commencing at 3 months of age and revaccinated in accordance with Part II of this Compendium.
   b. **Livestock**. It is not economically feasible, nor is it justified from a public health standpoint, to vaccinate all livestock against rabies. Owners of valuable animals and veterinary clinicians may consider immunizing certain livestock located in areas where wildlife rabies is epizootic and where colonies of bats exist.
   c. **Other Animals**.
      (1) **Animals Maintained in Exhibits and in Zoological Parks**. Captive animals not completely excluded from all contact with local vectors of rabies can become infected with rabies. Moreover, such animals may be incubating rabies when captured. Exhibit animals, especially those carnivores and omnivores having contact with the viewing public, should be quarantined for a minimum of 180 days. Since there is no rabies vaccine licensed for use in wild animals, vaccination even with inactivated vaccine is not recommended. Pre-exposure rabies immunization of animal workers at such facilities is recommended. This may reduce the need for euthanasia of valuable animals for rabies testing after they have bitten a handler.

Rabies — Continued

(2) **Wild Animals**. Because of the existing risk of rabies in wild animals (especially raccoons, skunks, and foxes), the American Veterinary Medical Association, the NASPHV, and the Conference of State and Territorial Epidemiologists strongly recommend the enactment of state laws prohibiting the importation, distribution, and relocation of wild animals and wild animals crossbred to domestic dogs and cats. These same organizations continue to recommend the enactment of laws prohibiting the distribution or keeping of wild animals as pets. Moreover, the NASPHV recommends that ferrets not be kept at pets, since they have severely bitten many people, especially inflicting mutilating bites to infants. Ferrets are susceptible to and could transmit rabies. There is no licensed rabies vaccine for use in ferrets.

2. **Stray-Animal Control**. Stray dogs or cats should be removed from the community, especially in rabies epizootic areas. Local health department and animal control officials can enforce the pick-up of strays more efficiently if owned animals are confined or kept on leash. Strays should be impounded for at least 3 days to give owners sufficient time to reclaim animals apprehended as strays and to determine if human exposure has occurred.
3. **Quarantine**.
   a. **International**. Present USPHS regulations (42 CFR No. 71.51) governing the importation of domestic felines and canines are minimal for preventing the introduction of rabid animals into the United States. All dogs and cats imported from countries with endemic rabies should be vaccinated against rabies at least 30 days prior to entry into the United States.† The Centers for Disease Control (CDC) is responsible for these animals imported into the United States. Their requirements should be coordinated with interstate shipment requirements. The health authority of the state of destination should be notified within 72 hours of any animal conditionally admitted into its jurisdiction.

      The conditional admission into the United States of such animals must be subject to state and local laws governing rabies. Failure to comply with these requirements should be promptly reported to the director of the CDC.
   b. **Interstate**. Prior to interstate shipment, dogs and cats should be vaccinated against rabies according to the compendium's recommendations and preferably shall be vaccinated at least 30 days prior to shipment. While in shipment, they should be accompanied by a currently valid NASPHV Form #50 Rabies Vaccination Certificate. One copy of the certificate should be mailed to the appropriate Public Health Veterinarian or State Veterinarian of the state of destination.
   c. **Health Certificates**. If a certificate is required for dogs and cats in transit, it must not replace the NASPHV rabies vaccination certificate.
4. **Adjunct Procedures**. Methods or procedures which enhance rabies control include:
   a. **Licensure**. Registration or licensure of all dogs and cats may be used as a means of rabies control by controlling the stray animal population. Frequently a fee is charged for such licensure and revenues collected are used to maintain a rabies or animal control program. Vaccination is usually recommended as a prerequisite to licensure.
   b. **Canvassing of Area**. This includes house-to-house calls by members of the animal control program to enforce vaccination and licensure requirements.

†In regard to cats, these recommendations do not conform to the official recommendations of CDC and the U. S. Public Health Service. Although domestic feline rabies has increased, there has been no evidence of increased risk of imported rabies in cats. U.S. Foreign Quarantine regulations do not require rabies vaccinations for imported cats.

Rabies – Continued

c. **Citations**. These are legal summonses issued to owners for violations including the failure to vaccinate or license their animals.

d. **Leash Laws**. All communities should adopt leash laws which can be incorporated in their animal control ordinances.

5. **Post-exposure Management**. ANY DOMESTIC ANIMAL THAT IS BITTEN OR SCRATCHED BY A BAT OR BY A WILD, CARNIVOROUS MAMMAL WHICH IS NOT AVAILABLE FOR TESTING SHOULD BE REGARDED AS HAVING BEEN EXPOSED TO A RABID ANIMAL.

a. **Dogs and Cats**. When bitten by a rabid animal, unvaccinated dogs and cats should be destroyed immediately. If the owner is unwilling to have this done, the unvaccinated animal should be placed in strict isolation for 6 months and vaccinated 1 month before being released. Dogs and cats that are currently vaccinated should be revaccinated immediately and observed by the owner for 90 days.

b. **Livestock**. All species of livestock are susceptible to rabies infection; cattle appear to be among the most susceptible of all domestic animal species. Livestock known to have been bitten by rabid animals should be destroyed (slaughtered) immediately. If the owner is unwilling to have this done, the animal should be kept under very close observation for 6 months.

The following are recommendations for owners of livestock exposed to rabid animals:

(1) If slaughtered within 7 days of being bitten, tissues may be eaten without risk of infection providing liberal portions of the exposed area are discarded. Federal meat inspectors will reject for slaughter any animal that has been exposed to rabies within 8 months.

(2) No tissues or secretions from a clinically rabid animal should be used for human or animal consumption. However, as pasteurization temperatures will inactivate rabies virus, the drinking of pasteurized milk or eating of completely cooked meat does not constitute a rabies exposure.

6. **Management of Animals That Bite Humans**. A healthy dog or cat that bites a person should be confined and observed for 10 days and evaluated by a veterinarian at the first sign of illness during confinement or before release. Any illness in the animal should be reported immediately to the local health department. If signs suggestive of rabies develop, the animal should be humanely killed and its head removed and shipped, under refrigeration, for examination by a qualified laboratory designated by the local or state health department. Any stray or unwanted dog or cat that bites a person may be killed immediately and the head submitted, as described above, for rabies examination.

C. **CONTROL METHODS IN WILD ANIMALS**

Bats and wild carnivorous mammals, as well as wild animals cross-bred with domestic dogs and cats, that bite people should be killed and appropriate tissues should be sent to the laboratory for examination for rabies. A person bitten by a bat or any wild animal should immediately report the incident to a physician who can evaluate the need for antirabies treatment. (See current rabies prophylaxis recommendations of the ACIP [*1,2*].)

1. **Terrestrial Mammals**. Continuous and persistent government-funded programs for trapping or poisoning wildlife as a means of rabies control are not cost effective in reducing wildlife reservoirs or rabies incidence on a statewide basis. However, limited control in high-contact areas (picnic grounds, camps, suburban areas) may be indicated for the removal of selected high-risk species of wild animals. The public should be warned not to handle wild animals. The state wildlife agency should be consulted early to manage any elimination programs in coordination with the state health department.

Rabies – Continued

2. **Bats**. Rabid bats have been reported from every state except Hawaii and have caused human rabies infections in the United States. It is neither feasible nor practical, however, to control rabies in bats by areawide bat population reduction programs. Bats should be eliminated from houses and surrounding structures to prevent direct association with people. Such structures should then be made bat proof by sealing routes of entrance with screen or other means.

References

1. ACIP. Rabies prevention—United States, 1984. MMWR 1984;33:393-402,407-8.
2. ACIP. Rabies prevention: supplementary statement on the preexposure use of human diploid cell rabies vaccine by the intradermal route. MMWR 1986;35:767-8.

Epidemiologic Notes and Reports

Antibody Response to A/Taiwan/86 (H1N1) Virus in Young Adults Receiving Supplemental Monovalent A/Taiwan/86 Influenza Vaccine Following Trivalent Influenza Vaccine

In accordance with recent recommendations (*1*), monovalent A/Taiwan/86 (H1N1) influenza vaccine was given to U.S. Air Force recruits who had been vaccinated 2 to 3 months previously with the 1986/87 trivalent influenza vaccine. Thirty-four recruits volunteered sera for antibody studies of immune response. At the time the A/Taiwan/86 vaccine was administered, 100% of the recruits had serum hemagglutination-inhibition (HI) antibody titers of $\geq$32 to the A/Chile/83 (H1N1) virus included in the trivalent vaccine, but only 45% had such titers to the A/Taiwan/86 strain. Following immunization with the supplemental monovalent vaccine, the proportion of recruits with HI antibody titers of $\geq$32 against A/Taiwan/86 virus increased to 100%, and 92% had HI titers $\geq$128 (Table 1).

Reported by G Meiklejohn, MD, Patricia Graves, School of Medicine, Univ of Colorado Health Sciences Center, Denver, Col G Hutchison, Lowry Air Force Base, Colorado; Lt Col M Evans, MD, Lackland Air Force Base, Texas; Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

Editorial Note: The above findings are consistent with previous reports (*2,3*) that the A/Chile/83 component of the 1986/87 trivalent vaccine may provide inadequate protection against the A/Taiwan/86 virus; protection may be boosted by use of the monovalent A/Taiwan/86 vaccine as recommended (*1*). Because all recently reported outbreaks of influenza A/Taiwan/86-like virus, where laboratory confirmation has been obtained, have occurred in children or young adults, it is particularly important that high-risk individuals in these age groups be given priority for vaccination with the supplemental A/Taiwan/86 vaccine. (See "Update of Influenza Activity, Availability of Influenza Vaccines, and Recommendations and Precautions for the Use of Amantadine", pp. 805-807.)

References

1. ACIP. Monovalent influenza A(H1N1) vaccine, 1986-87. MMWR 1986;35:517-21.
2. CDC. Antigenic variation of recent influenza A(H1N1) viruses. MMWR 1986;35:510-2.
3. CDC. Influenza activity in civilian and military populations and key points for use of influenza vaccines. MMWR 1986;35:729-31.

Influenza Vaccine — Continued

TABLE 1. Pre- and post-vaccination HI antibody response to A/Taiwan/86 antigen in 34 U.S. Air Force recruits receiving supplemental monovalent A/Taiwan/86 vaccine

Test Antigen	Serum Specimen*	Cumulative Percent with HI titer				
		≥8	≥16	≥32	≥64	≥128
A/Taiwan/86	Pre	72	62	45	37	32
	Post	100	100	100	95	92

*Sera were collected before and 2 to 3 weeks after vaccination with the supplemental monovalent A/Taiwan/86 vaccine. All 34 persons had been vaccinated 2 to 3 months previously with the 1986/87 trivalent influenza vaccine, which contains A/Chile/83(H1N1) antigen, but not A/Taiwan/86(H1N1) antigen.

Notice to Readers

Availability of Informational Material on AIDS

As part of the effort to inform the American public about the cause, modes of transmission, and other aspects of AIDS, the Public Health Service (PHS) and the American Red Cross launched a joint mass media campaign in mid-1985. Three television public service announcements aimed at dispelling misconceptions about getting AIDS from casual contact and at promoting use of the PHS toll-free hotline (1-800-342-AIDS) were developed and aired by stations nationwide. These announcements were recently sent to state AIDS coordinators, requesting that they encourage public service directors of television stations in their states to air them. Printed material produced in conjunction with the campaign is available for distribution.

The following materials, which were produced jointly by the PHS and the American Red Cross, can be obtained by writing to AIDS, Suite 700, 1555 Wilson Boulevard, Rosslyn, VA 22209:

Poster: Four-color poster features singer Patti LaBelle and carries the message,"Don't listen to rumors about AIDS. Get the Facts!" Provides PHS toll-free AIDS hotline number. (Up to 50 free copies)

Leaflets (Up to 50 free copies):

AIDS, Sex and You
Facts About AIDS and Drug Abuse
AIDS and Your Job — Are There Risks?
Gay and Bisexual Men and AIDS
AIDS and Children — Information for Parents of School Age Children
AIDS and Children — Information for Teachers and School Officials
Caring for the AIDS Patient at Home
If Your Test for Antibody to the AIDS Virus is Positive...

Additional materials, which were developed by the PHS, are available from the addresses indicated:

Surgeon General's Report on AIDS (October 1986). Write to AIDS, P. O. Box 14252, Washington, D.C. 20044. (Up to 50 free copies)

Facts About AIDS. Write to AIDS, Suite 700, 1555 Wilson Boulevard, Rosslyn, VA 22209. (Up to 50 free copies)

Scriptographic booklets. Write to Office of Public Inquiries, Centers for Disease Control, Building 1, Room B-63, 1600 Clifton Road, Atlanta, GA 30333. (Up to 25 free copies):

What Everyone Should Know About AIDS (also available in Spanish)

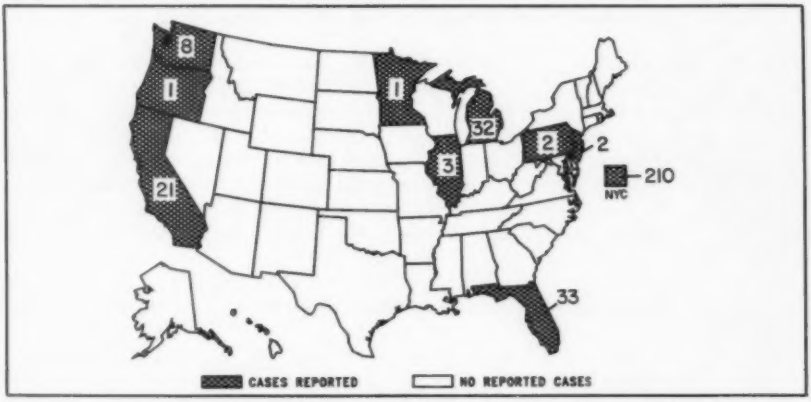
AIDS – Continued

Why You Should Be Informed About AIDS (for health care workers)
What Gay and Bisexual Men Should Know About AIDS
AIDS and Shooting Drugs

Videotapes. To purchase tapes ($55 each), write to National Audiovisual Center, 8700 Edgeworth Drive, Capitol Heights, MD 20743-3701, Attn: Customer Service Section; telephone (301)763-1896. For free loan, write to Modern Talking Picture Service, 5000 Park Street, North, St. Petersburg, FL 33709, Attn: Film Scheduling; telephone (813)541-5763:

AIDS: Fears and Facts (for the general public)
What If the Patient Has AIDS? (for health care workers)
AIDS and Your Job (for policemen, firemen, and other emergency personnel)

FIGURE I. Reported measles cases — United States, weeks 49-52, 1986



*U.S. Government Printing Office: 1987-730-145/40041 Region IV

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